

Notice of Allowability

Application No.

09/337,278

Examiner

Gentle E Winter

Applicant(s)

HIROOKA ET AL.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/20/04.
2. ☒ The allowed claim(s) is/are 1, 5, 10, and 20-22, renumbered as 1-6.
3. ☒ The drawings filed on 22 June 1999 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 081004.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Reasons for Allowance

1. The following is a statement of reasons for the indication of allowable subject matter:

2. Miyashita fails to teach each and every limitation of the instant invention.


Specifically, Miyashita fails to teach the disclosed resistivity in connection with the water, that the sponge is washed with the same solution that is used in cleaning the wafer and that the sponge is separated from the wafer during the cleaning operation, which is disclosed as an essential element of claimed invention, as described in claim 1.

3. Further, while Miyashita and Kanno, taken together appear to teach many of the currently claimed invention elements, the references, and the prior art of record, apparently fail to provide the requisite motivation for making the instantly claimed combination. Especially noteworthy is the ultrapure water with the higher concentration of CO₂. It is noted that the claims are unambiguous that the 5 M-Ohm value is achieved by the addition of CO₂, and not by the presence of impurities that might be in the water resulting in a lower resistivity. Therefore, the present invention lowers the resistivity (making the water more conductive) exclusively with the addition of CO₂, and not with the addition of any other chemical or substance. The “consisting essentially language was agreed to by this examiner with the explicit understanding that there was nothing of consequence in the water except the CO₂. Applicant has demonstrated that a level of resistivity below 5 M-Ohms yields dramatically improved particle removal rates. For the foregoing reasons, and others, claims 1, 5, 10, and 20-22, renumbered as 1-6 are believed to recite patentable subject matter.

Art Unit: 1746

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E Winter whose telephone number is 571-272-1310. The examiner can normally be reached on Monday through Friday 7AM-4PM.
5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MICHAEL BARR
PRIMARY EXAMINER

Gentle E. Winter
Examiner
Art Unit 1746